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PROCESSING DIVERSITY SIGNALS USING A DELAY

ABSTRACT OF THE DISCLOSURE

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Processing a downlink signal includes receiving a downlink signal at the antennas of a mobile device, where each antenna generates a diversity signal associated with the downlink signal, and where the downlink signal includes information. Diversity signals are generated and a delay of less than one chip duration is applied to at least one of the diversity signals. The diversity signals are then processed to obtain the information. Processing a transmit signal includes receiving a transmit signal at a splitter, where the transmit signal includes information. The transmit signal is split into split signals. At least one delay is applied to at least one of the split signals to yield transmit diversity signals, and the transmit diversity signals are transmitted.